

*Please provide the following information, and submit to the NOAA DM Plan Repository.*

**Reference to Master DM Plan (if applicable)**

*As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.*

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

**1. General Description of Data to be Managed****1.1. Name of the Data, data collection Project, or data-producing Program:**

Horry County South Carolina Orthophotography

**1.2. Summary description of the data:**

Orthophotos combine the image characteristics of a photograph with the geometric qualities of a map. The primary digital orthophoto is a 15cm GSD resolution with tiles measuring 1500 x 1500 meters cast on the Universal Transverse Mercator Zone 17N on the North American Datum of 1983 (NAD83/2007). The aerial photography used to create the digital images was acquired between February 16th and March 8th, 2010.

**1.3. Is this a one-time data collection, or an ongoing series of measurements?**

One-time data collection

**1.4. Actual or planned temporal coverage of the data:**

2010

**1.5. Actual or planned geographic coverage of the data:**

W: -79.317294806, E: -78.524434796, N: 34.30798878, S: 33.57605894

**1.6. Type(s) of data:**

*(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)*  
remote sensing image

**1.7. Data collection method(s):**

*(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)*

**1.8. If data are from a NOAA Observing System of Record, indicate name of system:****1.8.1. If data are from another observing system, please specify:**

**2. Point of Contact for this Data Management Plan (author or maintainer)****2.1. Name:**

NOAA Office for Coastal Management (NOAA/OCM)

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

NOAA Office for Coastal Management (NOAA/OCM)

**2.4. E-mail address:**

coastal.info@noaa.gov

**2.5. Phone number:**

(843) 740-1202

**3. Responsible Party for Data Management**

*Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.*

**3.1. Name:****3.2. Title:**

Data Steward

**4. Resources**

*Programs must identify resources within their own budget for managing the data they produce.*

**4.1. Have resources for management of these data been identified?****4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):****5. Data Lineage and Quality**

*NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.*

**5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible**

*(describe or provide URL of description):*

Process Steps:

- 2010-10-01 00:00:00 - The Digital Orthoimagery is comprised of 8 bit color imagery captured by the Panoramix camera. Using the Preprocessor software, data was unpacked and indexed. A QA/QC process was performed to ensure integrity of the raw data. An automated radiometric calibration was performed as an initial

adjustment to aid in creating consistent imagery. GPS data captured during flight was processed and integrated into the project, after which a block solution was calculated in the Dataviewer software. A QA/QC process was performed on this solution to identify any anomalies. This was done by reconstructing various points in the solution. Ground Control was imported into the Dataviewer software and measured in order to refine the solution. The surface model from the 2009 Horry County project, with some updated areas, was imported into the Dataviewer software. The imagery was then rectified for each flight line using the refined block solution and the imported surface model. A QA/QC process was performed to check for any rectification errors. The rectified imagery was exported from the Dataviewer software along with a reduced resolution mosaic, or Quicklook, of each of these imagery strips. The quicklooks were radiometrically adjusted using Earthdata Proprietary software and then imported into the Pixel Factory software along with the full resolution mosaic flight lines. The histogram from the quicklook was applied to the full resolution imagery. Mosaic lines were placed, joining the imagery strips. In initial QA/QC was performed by the technician to ensure that the mosaic lines were appropriately placed and that there was appropriate imagery coverage. The final imagery data set was removed from the Pixel Factory environment in a process called "packaging" where the individual tiles are created. The created tiles are reviewed again for anomalies and interactive radiometric adjustment applied where needed. QA/QC was performed looking for anomalies, smears and other indications of problems within the digital orthophoto creation process, interactive radiometric adjustment applied where needed. Two additional radiometric adjustments are applied to the completed orthos in Adobe Photoshop. The first is a sharpening mask filter; this filter is used to help increase sharpness of a digital image. The basis for this filter is to locate pixels that differ in value from surrounding pixels by the threshold specified. It then increases the pixels contrast by the value identified. For neighboring pixels specified by the threshold, the lighter pixels get even lighter and the darker pixels get even darker based on the specified amount. The changes made maintained the integrity of the original histogram curve. The imagery is then Projected to the appropriate co-ordinate system and recut to the tiling scheme required for delivery. The final digital ortho product was GEOTIFF files. All data was delivered on external hard drives.

**5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:**

**5.2. Quality control procedures employed (describe or provide URL of description):**

## **6. Data Documentation**

*The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides*

*links to resources and tools for metadata creation and validation.*

**6.1. Does metadata comply with EDMC Data Documentation directive?**

No

**6.1.1. If metadata are non-existent or non-compliant, please explain:**

Missing/invalid information:

- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.3. Data access methods or services offered
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

**6.2. Name of organization or facility providing metadata hosting:**

NMFS Office of Science and Technology

**6.2.1. If service is needed for metadata hosting, please indicate:**

**6.3. URL of metadata folder or data catalog, if known:**

<https://www.fisheries.noaa.gov/inport/item/49490>

**6.4. Process for producing and maintaining metadata**

*(describe or provide URL of description):*

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: [https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC\\_PD-Data\\_Documentation\\_v1.pdf](https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf)

**7. Data Access**

*NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.*

**7.1. Do these data comply with the Data Access directive?**

**7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?**

**7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:**

**7.2. Name of organization of facility providing data access:**

NOAA Office for Coastal Management (NOAA/OCM)

**7.2.1. If data hosting service is needed, please indicate:****7.2.2. URL of data access service, if known:**

<https://coast.noaa.gov/dataviewer/#/imagery/search/where:ID=443>

<https://coast.noaa.gov/digitalcoast>

[https://coast.noaa.gov/htdata/raster2/imagery/HorrySC\\_2010\\_443](https://coast.noaa.gov/htdata/raster2/imagery/HorrySC_2010_443)

**7.3. Data access methods or services offered:****7.4. Approximate delay between data collection and dissemination:**

**7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:**

**8. Data Preservation and Protection**

*The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.*

**8.1. Actual or planned long-term data archive location:**

*(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)*

**8.1.1. If World Data Center or Other, specify:****8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:****8.2. Data storage facility prior to being sent to an archive facility (if any):**

Office for Coastal Management - Charleston, SC

**8.3. Approximate delay between data collection and submission to an archive facility:**

**8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?**

*Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection*

**9. Additional Line Office or Staff Office Questions**

*Line and Staff Offices may extend this template by inserting additional questions in this section.*